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DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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November 25, 1991

Mr. David Taylor
President
Miracle Rock Mining Company
P. O. Box 28
Ferron, Utah 84523

Dear Mr. Taylor:

Re: Review of Large Mining Notice of Intent, Body Tody Mine, M/015/040, Emery County, Utah

The following is the Division's initial review of the plan you submitted on October 12, 1991. The plan has been found to be deficient. Our review addresses the deficiencies by section of the Minerals Rules as described below:

R613-004-105 - Maps, Drawings & Photographs

105.1 - Base Maps

The operator will need to provide the Division with a set of maps which defines more specifically, the area to be mined. The Division will provide a map showing general location, proximity to the nearest publicly maintained highway and general surface ownership. The operator must provide maps which detail the areas of the site which are currently disturbed and which will be disturbed. The maps must show all roads, portals, quarries, belt lines, etc. associated with the site. The operator must also provide a set of maps or map which shows the post-mining reclamation applications to be implemented once mining is complete.

Please provide an accurate scale with these maps so that any measurements which are made from them will be accurate. - HWS & DWH

The operator needs to indicate on a map what drainages (ephemeral, intermittent or perennial) might be impacted by the operation. These must be clearly defined on any mine site development maps. - DWH

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During our discussions with you on November 9, 1991, you indicated that there were no drainages on the mine site which might be impacted by mining. However, we did discuss the fact that Muddy Creek does run relatively close to the area where the truck turn-around will be established. You need to establish this relationship on your maps and indicate any sediment controls you plan to construct at the truck turn-around. - HWS

105.3 - Slopes, roads, pads, impoundment, ponds, maps, etc.

The operator needs to provide diagrams of typical cross sections of the mine quarry during operations and after reclamation. - AAG

This concept was discussed during our November 8th meeting. You indicated that you could draw up some cross-sections of the operational phase and the projected reclaimed phase. - HWS

R613-004-106 - Operation Plan

106.3 - Estimated acreages

Please insure that the acreage identified on the maps corresponds to that in the language of the Notice of Intent. The Notice of Intent indicated that a total of 18 acres would be disturbed, please break this acreage down into specific areas. - AAG and HWS

106.4 - Nature of materials including waste/overburden and estimated tonnage

What is the basis for the estimated 77,440 CY of waste material? Does this originate from the pit dimensions? What are the pit dimensions? What is the nature of the overburden/wastes? Will it be in the form of fines or coarse material? - AAG

106.5 - Existing soil types, location plant growth material

Please identify those areas from where topsoil will or may be stripped. How will it be stripped and where will it be stockpiled? Stockpile areas should be identified on the maps, and once they are on the ground they need to be protected with signs and berms. - HWS

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106.8 - Depth to groundwater, overburden material & geologic setting

What is the approximate depth to groundwater in the vicinity of the operation? - DWH

R613-004-107 - Operation Practices

107.1.11 - Closing or guarding of shafts & tunnels to prevent entry

Please explain what method you will use to close the one portal on site at reclamation. - AAG

107.1.12 - Disposal of trash, debris

Please explain your method of disposing of trash and debris generated at the site. - AAG

107.1.15 - Construction of berms, fences

Depending on the extent and depth of the quarry it may be necessary to berm or fence the perimeter of the pit during operations to prevent hazards to the public. If the highwalls are not too extreme or extensive it may not be necessary to construct barricades. - AAG and HWS

107.2 and 107.5 - Drainages to minimize damage and Erosion Control

Will runoff control measures be necessary to implement on this site? It is necessary to insure that disturbed area drainage does not impact natural drainage ways, or does not commingle with natural drainage unless first treated (i.e. passed through straw bales or silt fence) especially in areas where runoff will directly impact a perennial stream. Please describe the nature of any proposed onsite erosion control measures and where they will be implemented. - AAG, DWH and HWS

107.5 - Suitable soils removed & stored

The operator needs to describe in the plan how topsoil will be salvaged. As indicated earlier, storage areas should be indicated on the maps. - HWS

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R613-004-109 - Impact Assessment

109.1 - Surface & groundwater systems

Please describe any projected of any surface or groundwater impacts that could arise from this mining operation. If none are probable, please describe why not. - DWH

109.2 - Endangered species or habitats

The Division will look into the question of impacts to endangered species in this area. - HWS

109.4 - Slope stability, erosion control, air quality, public health & safety

The operator is in the process of acquiring an air quality permit. Please explain the status of this permit and its requirements in relation to your operation. - DWH

R613-004-110 - Reclamation Plan

110.2 - Roads, highwalls, slopes impoundments, drainages, pits, ponds, drill holes, etc. will be reclaimed

Please explain your backfilling and grading plan in relation to the quarry. What will be the final configuration of the regraded highwall or slopes? - AAG and HWS

110.3 - Surface facilities to be left

You indicated that no surface structures will remain after mining. How will these structures be removed? Will they be taken off site and disposed of, buried on site or sold? - HWS

110.5 - Revegetation planting program

Please verify that you will rip, mulch, fertilize, seed and scarify areas that will be reclaimed. Also confirm that topsoil will be replaced onto areas were it was originally

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available. If you can be more specific about your planting program please elaborate in your response. The Division will provide a seed list for you. - HWS

R613-004-111 - Reclamation Practices

111.8 - Roads & pads when no longer needed

Please explain how the roads and staging areas will be reclaimed. Any compacted areas must be ripped at a minimum before revegetation. Most roads will require regrading, especially in steep areas. - AAG and HWS

111.10 - Trenches and pits reclaimed

Please verify that the pit will be backfilled and no highwalls will remain. - HWS

111.12 - Topsoil redistribution on stable surface to minimize erosion and compaction

How (areas and depth) will the topsoil which is salvaged be redistributed? - HWS

111.13 - Revegetation to include adaptable perennial species

See attachment for recommended species list. You will need to commit to using this list, in your response to this letter. - HWS

R613-004-112 - Variance

The operator needs to provide justification for the topsoil variance requested in the Notice. - AAG

R613-004-113 - Surety

The surety estimate has already been sent to the operator. It should be sufficient to cover the required reclamation even though the details of the Mining and Reclamation Plan have not been finalized. - HWS

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R613-004-115 - Confidential Information

The operator requested that certain information be held as confidential. During our conversation on November 8th, you indicated that this information had to do with the size and extent of the ore body. The Division will remove any reference of this information from the public record.

Please respond to each of our review questions by section, as indicated. Please contact me directly if you have questions regarding this letter. Thank you for your cooperation.

Sincerely,

A handwritten signature in dark ink, appearing to read "H. Shepherd", written in a cursive style.

Holland Shepherd
Senior Reclamation Specialist

jb
Attachment
cc: Lowell Braxton
Minerals Staff
M015040

Recommended Species List
for
Body Tody Mine

M/015/040

<u>Species Common Name</u>	<u>Scientific Name</u>	<u>*Seeding Rate/lb/ac</u>
1. Indian Ricegrass	Oryzopsis hymenoides	2
2. Tall wheatgrass	Agropyron elongatum	2
3. Bluebunch wheatgrass	Agropyron spicatum	3
4. Crested wheatgrass	Agropyron desertorum	1
5. Sand dropseed	Sporobolus cryptandrus	1
6. Yellow sweetclover	Melilotus officinalis	2
7. Desert globemallow	Sphaeralcea grossulariaefolia	2
8. Rabbitbrush	Chrysothamnus nauseosus	1
9. 4-wind saltbush	Atriplex canescens	3
10. Winterfat	Eurotia lanata	3
Total		20 lb/ac

*Rate for broadcast seeding. If drill seeding is used, decrease rate by 1/3.